



Introduction

- Key Center for Disease Control and Prevention (CDC) statistics on outpatient antibiotic prescribing:
- 266.1 million courses of antibiotics are dispensed to outpatients in community pharmacies. This equates to more than 5 prescriptions written each year for every 6 people in the U.S.
- At least 30% of antibiotics prescribed in the outpatient setting are unnecessary.
- Total inappropriate antibiotic use, inclusive of unnecessary use and inappropriate selection, dosing, and duration, may approach 50% of all outpatient antibiotic use.
- The majority (>60%) of antibiotic expenditures are associated with the outpatient setting.
- An estimated 80-90% of the volume of human antibiotic use occurs in the outpatient setting.
- Antimicrobial stewardship in the community is essential as majority of antibiotic prescribing occurs in the outpatient setting.
- Pharmacists are recognized by CDC as co-leaders for implementing efforts to improve antibiotic use.
- The Joint Commission mandates antimicrobial stewardship programs in inpatient settings, but there is currently no standard that mandates antimicrobial stewardship in the outpatient setting.

Objective

- To evaluate current antimicrobial stewardship practices in community pharmacies across the U.S.
- To identify challenges that community pharmacists face regarding antimicrobial stewardship, if any.

Method

- A 15-item survey was created based on CDC's Core Elements of Outpatient Antimicrobial Stewardship.
- Survey invite was posted on the Facebook group, Pharmacist Moms, in September 2019.
- Participation was voluntarily and anonymous.
- IRB was obtained from St. John's University.

Antimicrobial Stewardship Practices in Community Pharmacies Across the United States

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Table 1. Baseline Demographics					Fi	gure 1. How in
State of Practice (n=61)	No. (%)	Practice Setting	No. (%)	30		
Pennsylvania North Carolina Texas Oklahoma	7 (11.5) 5 (8.2) 5(8.2) 4 (6.6)	Chain pharmacy Independent Specialty Pharmacy with walk-in clinic	52 (85.2) 5 (8.2) 2 (3.3) 2 (3.3)	25 — 20 — 15 — 10 — 5 —	2 (3.3%)	5 (8
New YOIK	4 (0.0)	Years in Practice		0	2 (0.070)	
Alabama Massachusetts Indiana Tennessee Obio	3 (4.9) 3 (4.9) 3 (4.9) 3 (4.9) 2 (3.3) 2 (3.3) 3 (3	1-5 6-10 11-15 16-20 >20	16 (26.2) 22 (36.1) 14 (23) 6 (9.8) 3 (4.9)	40 —	No opinion Figure 2. If pr	Not impo ovided the op
Wisconsin	2 (3.3)	Current Role		30 —		
California Illinois Louisiana Maryland	2 (3.3) 2 (3.3) 2 (3.3) 2 (3.3) 2 (3.3)	Staff pharmacist Manager/ Supervisor Clinical pharmacist Store owner	33 (54.1) 23 (37.7) 4 (6.6) 1 (1.6)	20	0	1
Mississippi	2 (3.3)	Residency Trained			Undecided	Very
Colorado South Carolina Washington Arizona	1 (1.6) 1 (1.6) 1 (1.6) 1 (1.6)	PGY-1 PGY-2 No	2 (3.3) 1 (1.6) 58 (95.1)	40	Figure 3. Do	bes your phari
Nebraska North Dakota	1 (1.6) 1 (1.6)	Completed Antimicrobial Stewardship Certification		30 — 20 —		
Oregon Missouri	1 (1.6) 1 (1.6)	Yes No	1 (1.5) 60 (98.4)	10	5 (8.2	%)
				0	Va	

Figure 4. Current Trends of U.S. Community Pharmacies in Meeting **CDC's Core Elements of Outpatient Antimicrobial Stewardship (n=61)**

COMMITMENT: Can your pharmacy demonstrate dedication to and accountability for optimizing antibiotic use and patient safety related to antibiotics?

ACTION: Has your pharmacy implemented at least one policy or practice to improve antibiotic use?

TRACKING & REPORTING: Does your pharmacy monitor at least one aspect of antibiotic use?

EDUCATION & EXPERTISE: Does your pharmacy provide resources to the pharmacy staff on evidence-based antibiotic use?

EDUCATION & EXPERTISE: Does your pharmacy provide resources to patients on evidence-based antibiotic use?



Results from this study reveal the lack of antimicrobial stewardship practices in community pharmacies across the U.S. Majority of participants (67.2%) feel that antimicrobial stewardship in the community is important and if given the opportunity, they would participate in stewardship activities (88.5%). Many challenges exist in the community setting inhibiting the full potential of pharmacists in stewardship efforts. Some of these barriers include the lack of time and staff, pushback from prescribers, lack of leadership, lack of financial incentives, pushback from patients, the lack of training, and the lack of funding. This study highlights the importance and need for addressing these issues as regulations and strategies for antimicrobial stewardship in community settings develop.

Results

Conclusions

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18 (29.5%)

13 (21.3%)

12 (19.7%)

7 (11.5%)